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EXAMINER

CHANG, SHIRLEY

ART UNIT	PAPER NUMBER
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2623

DATE MAILED: 04/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/854,339

Applicant(s)

KIKINIS ET AL.

Examiner

Shirley Chang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 January 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

Applicant's arguments with respect to claims 10, 21, and 33 have been considered but are moot in view of the new ground(s) of rejection.

a. Applicant argues on page 7, second paragraph that the combination of Rowe, Nikolovska, Stautner, and Knudson is improper.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, as to the combination of Rowe and Nikolovska, the combination is indeed proper: although Rowe et al. does not specifically teach "a first unit to generate an interactive 3-D electronic programming guide (EPG)," Nikolovska et al. discloses "FIG. 1 shows a user interface in accordance with the invention as applied to television programming in a starting configuration. The interface displays an "information space" with three axes" [2, 24-33]. The motivation to modify the Rowe et al. reference include to "an interactive 3-D electronic programming guide" is found in Nikolovska for the advantage of 'creating a better organization of an information space and queries' Nikolovska [1, 24-28].

As to the combination of Rowe and Nikolovska and Nikolovska, the combination is indeed proper: although Rowe et al. and Nikolovska et al. do not specifically teach, "wherein the second set of objects includes localized content," Stautner et al. discloses "In the case of viewing an advertisement or offer of merchandise, such as is shown in FIG. 2, an order can be placed, for example, for a pizza from a national or local chain, by selecting for example icon 40. An automated sequence of events performed by the computer would then extract a proper telephone number from the data base, dial the particular number and place the user in a situation where they are in voice contact with the pizza restaurant or alternatively, provide for an automatic selection of the specifications of their desired pizza" [6, 49-60]). The motivation to modify the Rowe et al. and Nikolovska et al. references to include to "localized content" is to allow for convenience and more personalized content, Stautner (col. 5, lines 61-col. 6, line 7; col. 6, lines 49-60).

As to the combination of Rowe and Nikolovska, Nikolovska, and Stautner, the combination is indeed proper: although Rowe et al., Nikolovska et al., and Stautner et al. do not specifically teach, "wherein the localized interactive content of the third set of objects is uploaded in real time," Knudson et al. disclose "Each television distribution facility 26 may distribute both the program guide data received from program guide database 24 and the real-time data received from real-time data sources 30 to the program guides of users" [6, 26-43]). The motivation to modify the Rowe et al., Nikolovska et al. and Stautner et al. references to include to "uploading in real time" is to "allow real-time data on sports scores to the program guide" Knudson [1, 25-42].

Further applicant argues that the *Teleflex, Inc. v KSR International Co* decision is non-precedential on page 7, lines 6-7.

Claim Rejections - 35 U.S.C. § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-5, 8, 9, 12-16, 19, 20, 23-27, and 29-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe et al. (5623613) in view of Nikolovska et al. (6281898).**

As to claim 1,

Rowe et al. disclose "a database interconnected to an offline archive storing a plurality of objects associated with past programming events" ("In addition, the set-top converter 32 can update the programming information presented by the schedule display 50 by outputting a request to the headend processor 14 via the return path supplied by the cable distribution network 28. This allows the retrieval of desired programming information from the memory storage device 12 containing the database which maintains program guide data" [9, 29-46]; "For past and future programs, the preview section 92 can display on-demand attract clips, which may be a more effective mechanism for attracting viewers than text-only descriptions of the programming" [14,

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46-55]). Since applicant defines offline as "offline means that objects are stored on the one or more servers and accessible through the network 235," the offline archive is met as discussed.

Although Rowe et al. does not specifically teach "a first unit to generate an interactive 3-D electronic programming guide (EPG)," Nikolovska et al. discloses "FIG. 1 shows a user interface in accordance with the invention as applied to television programming in a starting configuration. The interface displays an "information space" with three axes" [2, 24-33]. Accordingly, it would have been obvious to one of ordinary skill in the art to modify the Rowe et al. reference include to "an interactive 3-D electronic programming guide" as taught by Nikolovska, to "create a better organization of an information space and queries" [1, 24-28].

As to claim 2, Rowe et al. disclose:

wherein the system comprises a set-top box (set-top converter 32), a television ("a receiving device 34, such as a television" [6,50-59]), or a VCR.

As to claim 3, Rowe et al. disclose:

wherein the system includes a plurality of drivers, one of the drivers communicating with a separate unit to replenish programming information (met by the system in figure 1).

As to claim 4,

Rowe et al. disclose "wherein a memory in the system contains a plurality of objects associated with current programming events" ("A memory storage device 12, such as a

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hard disk drive or an optical storage system, stores programming information in a digital format. One or more databases for various classes of programming information are maintained on the memory storage device 12" [5, 23-35]

Nikolovska et al. disclose "a first class of objects providing plurality of virtual worlds included in the 3-D EPG" ("FIG. 1 shows a user interface in accordance with the invention as applied to television programming in a starting configuration. The interface displays an "information space" with three axes" [2, 24-33]. Accordingly, it would have been obvious to one of ordinary skill in the art to modify the Rowe et al. reference include to "virtual worlds" as taught by Nikolovska, to "create a better organization of an information space and queries" [1, 24-28]).

As to claim 5, Rowe et al disclose:

wherein the memory in the system includes a second set of objects that includes at least one of a schedule times, channel identification, or title, corresponding to a program ("Each program tile 66' represents information about a selected program and can display the program title or name, and the channel number. Each program tile 66' also can include the network name and the network symbol, which is typically implemented as an icon graphically representing the logo of the corresponding channel or network. If display space is available within the limited area of the program tile, then program information of secondary interest to the user can be presented as information icons on the program tiles 66'. Information icons, which are graphical images representing secondary information items, can be used to reduce the amount of text displayed by a program tile, thereby making it easier for the subscriber to locate and read the program

titles. Information icons can represent a variety of secondary program-related information, including the items of closed captioning, audience rating, awards, star rating, or reruns status. It will be understood that the use of information icons is an option for the user interface supplied by the program schedule 50" [13, 57-67]).

As to claim 8, Nikolovska et al. discloses:

wherein the 3D EPG includes a presentation of a virtual world related to content selected by a user FIG. 5 shows what happens if the user clicks on the bar 501, which is the base of the preview wall. In response to such a selection, the preview wall 502 appears, with a preview screen 503. Like the selectors of FIG. 3, the preview screen is jointed to follow the cone of vision of the user, as the user's point of view changes. The preview wall 502 optionally includes VCR-like commands for control of the preview and potentially of the VCR 5, i.e. "play", "stop", "record", "program". Because the tower 102 allows the user to scroll to any arbitrary date, the programming features of the preview wall would allow the user to program the VCR to record several weeks into the future. The "edit" command can be invoked to do programming editing using the recording timer") [4, 12-25].

As to claim 9, Rowe discloses:

wherein a subset of the virtual world is displayed as a matrix of rectangular boxes containing current program information ("To "spin" one of the displays 52, 54, or 56, the focus frame 60 is moved along the viewing panel 58 to one of the displays. When the

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focus frame 60 is located proximate to the selected display, the subscriber has the option of scrolling up or down to reveal additional tiles. For the schedule display 50 shown in FIG. 2, the focus frame 60 is located proximate to the category display 52, thereby allowing the subscriber to scroll the category tiles 62 representing categories of programming information. FIGS. 3 and 4 respectively show the focus frame 60 located proximate to the subcategory display 54 and the program display 56, thereby allowing the subscriber to control the items presented by these displays. For the preferred schedule display 50, each of the displays 52, 54, and 56 uses three-dimensional shading to indicate that a tile is scrolling off beyond the visible area of its display" [8, 22-37]).

As to claim 12, Rowe et al disclose:

generating an interactive 3-D electronic programming guide (EPG); and providing a database interconnected to an offline archive storing a plurality of objects associated with past programming events (met as discussed in claim 1).

As to claim 13, Rowe et al disclose:

further including storing in a memory a plurality of objects associated with current programming events VCR (met as discussed in claim 1).

As to claim 14, Rowe et al disclose:

performed by a set-top box, a television system, or a VCR (met as discussed in claim 2).

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As to claim 15, Nikolovska et al. discloses:

wherein the plurality of objects includes a first set of objects providing plurality of virtual worlds included in the 3-D EPG (met as discussed in claim 4).

As to claim 16, Rowe et al disclose:

wherein the plurality of objects includes a second set of objects that includes at least one of a schedule times, channel identification, or title, corresponding to a program (met as discussed in claim 5).

As to claim 19, Nikolovska et al. disclose:

wherein the 3D EPG includes a presentation of a virtual world related to content selected by a user (met as discussed in claim 8).

As to claim 20, Rowe et al disclose:

wherein a subset of the virtual world is displayed as a matrix of rectangular boxes containing current program information (met as discussed in claim 9).

As to claim 23, Rowe et al disclose:

machine-readable storage medium tangibly embodying a sequence of instructions executable by the machine to perform a method for providing for a 3-D enabled electronic programming guide (EPG), the method comprising: generating an interactive 3-D electronic programming guide (EPG); and providing a database interconnected to

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an offline archive storing a plurality of objects associated with past programming events (met as discussed in claim 1).

As to claim 24, Rowe et al disclose:

The machine-readable storage medium of claim 23 stored in a set-top box, a television, or a VCR (met as discussed in claim 2).

As to claim 25, Rowe et al disclose:

The machine-readable storage medium of claim 24 further including instructions to provide a plurality of drivers, one of the drivers communicating with a separate unit to replenish programming information (met as discussed in claim 3).

As to claim 26, Nikolovska et al disclose:

The machine-readable storage medium of claim 24 further including instructions to provide a plurality of objects associated with current programming events, including a first class of objects providing plurality of virtual worlds included in the 3-D EPG (met as discussed in claim 4).

As to claim 27, Rowe et al disclose:

The machine-readable storage medium of claim 26 wherein the plurality of objects includes a second set of objects that includes at least one of a schedule times, channel identification, or title, corresponding to a program (met as discussed in claim 5).

As to claim 29, Nikolovska et al disclose:

The machine-readable storage medium of claim 28 wherein the 3D EPG includes a presentation of a virtual world related to content selected by a user (met as discussed in claim 8).

As to claim 30, Rowe et al disclose:

The machine-readable storage medium of claim 29 wherein a subset of the virtual world is displayed as a matrix of rectangular boxes containing current program information (met as discussed in claim 9).

As to claim 31, Nikolovska et al disclose:

The machine-readable storage medium of claim 30 wherein a user of the system chooses a virtual world to display programming information (met as discussed in claim 4).

2. Claims 6, 7, 11, 17, 18, 22, 28, 32, and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe et al. (5623613) in view of Nikolovska et al. (6281898), in further view of Stautner et al. (6172677).

As to claim 6,

Although Rowe et al. and Nikolovska et al. do not specifically teach, "wherein the second set of objects includes localized content," Stautner et al. discloses "In the case of viewing an advertisement or offer of merchandise, such as is shown in FIG. 2, an order can be placed, for example, for a pizza from a national or local chain, by selecting for example icon 40. An automated sequence of events performed by the computer

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would then extract a proper telephone number from the data base, dial the particular number and place the user in a situation where they are in voice contact with the pizza restaurant or alternatively, provide for an automatic selection of the specifications of their desired pizza" [6, 49-60]). Accordingly, it would have been obvious to one of ordinary skill in the art to modify the Rowe et al. and Nikolovska et al. references to include to "localized content" as taught by Stautner, to allow for convenience and more personalized content.

As to claim 7,

wherein the memory in the system includes a third set of non-EPG objects including objects used for e-commerce (item 70, figure 2, wherein the option to purchase a whale model, whale software, and/or whale book are available for purchase; "Specifically, embedded icons (30, 31, 40, 50, 60, 70, 71, or 80), such as are shown in FIG. 2, can provide links to advertising graphics which are stored locally for example on a hard disk or may be down loaded separately from a web server or from other types of sources. Additional video or sound which is stored locally on the hard disk of the computer system, may also be displayed or played by the user by highlighting a given link" [5,15-36]).

As to claim 11

further including a user interface for a user to interact with the localized interactive content of the 3D EPG (shown in figure 2).

As to claim 17,

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wherein the second set of objects includes localized content (met as discussed in claim 6).

As to claim 18,

wherein the plurality of objects includes a third set of non-EPG objects including objects used for e-commerce (met as discussed in claim 7).

As to claim 28, Nikolovska et al disclose:

The machine-readable storage medium of claim 27 wherein the memory in the system includes a third set of non-EPG objects including objects used for e-commerce (met as discussed in claim 7).

As to claim 32,

The machine-readable storage medium of claim 28 wherein the second set of objects includes localized content (met as discussed in claim 6).

3. Claims 10, 21, and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rowe et al. (5623613) in view of Nikolovska et al. (6281898), in further view of Stautner et al. (6172677), in further view of Knudson et al. (6536041).

As to claim 10,

Although Rowe et al., Nikolovska et al., and Stautner et al. do not specifically teach, "wherein the localized interactive content of the third set of objects is uploaded in real

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time,” Knudson et al. disclose “Each television distribution facility 26 may distribute both the program guide data received from program guide database 24 and the real-time data received from real-time data sources 30 to the program guides of users” [6, 26-43]). Accordingly, it would have been obvious to one of ordinary skill in the art to modify the Rowe et al., Nikolovska et al. and Stautner et al. references to include to “uploading in real time” as taught by Knudson to “allow real-time data on sports scores to the program guide” [1, 25-42].

As to claim 21,

“further including uploading the localized interactive content of the third set of objects in real time” (met as discussed in claim 10).

As to claim 22,

“providing a user interface coupled to the EPG for a user to interact with the localized interactive content” (met as discussed in claim 11).

As to claim 33,

“the machine-readable storage medium of claim 32 wherein the localized interactive content of the third set of objects in uploaded in real time” (met as discussed in claim 10).

As to claim 34,

“The machine-readable storage medium of claim 33 further including a user interface for a user to interact with the localized interactive content of the 3D EPG” (met as discussed in claim 11).

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shirley Chang whose telephone number is (571) 272-8546. The examiner can normally be reached on 8:30-5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Grant can be reached on (571) 272-7294. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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